

What is claimed is:

1. An automation system for speaker amplifier setup, comprising:
 - a computer-readable storage medium containing a set of commands that implement speaker amplifier system panel setup functions;
 - a signal source capable of transmitting command signals conforming to the command set contained on said computer-readable storage medium;
 - a speaker amplifier system panel capable of executing said set of commands;
 - and
 - a functional element of said speaker amplifier system panel capable of receiving said command signals.
2. The automation system for speaker amplifier setup of claim 1, wherein said signal source further comprises:
 - a human interface subsystem supporting command and configuration input and display for said control processor unit;
 - a nonvolatile storage subsystem storing and retrieving data on behalf of said signal source unit; and
 - a communications subsystem establishing a communication link between said speaker amplifier system panel and said signal source.
3. The automation system for speaker amplifier setup of claim 1, further comprising:
 - at least one speaker amplifier, wherein said speaker amplifier is capable of bidirectional digital communication with said speaker amplifier system panel; and
 - a communications network connecting said speaker amplifier system panel and said speaker amplifier, said network conveying digitally transmitted instructions from said speaker amplifier system panel to said speaker amplifier.

4. The automation system for speaker amplifier setup of claim 1, further comprising:

at least one speaker amplifier, wherein said speaker amplifier receives and audibly reproduces analog audio signals.

5. The automation system for speaker amplifier setup of claim 2, wherein said human interface subsystem further comprises:

a video display, whereupon said display output of said configuration status display routine can be displayed;

a keyboard-type data entry device whereby data and commands comprising keystrokes may be entered; and

a mouse-type data entry device, whereby position data and mouse-click commands may be entered.

6. The automation system for speaker amplifier setup of claim 2, wherein said nonvolatile storage subsystem further comprises a disk drive, interface electronics, and storage-/retrieval-support operating system software.

7. The automation system for speaker amplifier setup of claim 2, wherein said communications subsystem further comprises a bidirectional communications port and interface electronics.

8. The automation system for speaker amplifier setup of claim 7, wherein said communications subsystem further comprises an RS-485 bidirectional differential serial peripheral communications port and interface electronics.

9. The automation system for speaker amplifier setup of claim 7, wherein said communications subsystem further comprises an IEEE-802 Ethernet® bidirectional serial peripheral communications port and interface electronics.

10. The automation system for speaker amplifier setup of claim 7, wherein said communications subsystem further comprises an RS-232 bidirectional single-ended serial peripheral communications port and interface electronics.

11. The automation system for speaker amplifier setup of claim 1, wherein said signal source further comprises:

- a command transmittal routine;

- a system monitor routine;

- a system status report generator; and

- a configuration status display routine for generating a display output, wherein said configuration status display is a representation of said commands and said system status reports.

12. The automation system for speaker amplifier setup of claim 11, wherein said command transmittal routine transmits a command that exerts control over said speaker amplifier system panel.

13. The automation system for speaker amplifier setup of claim 1, wherein said set of commands permits a multiplicity of command signals to be issued;

14. The automation system for speaker amplifier setup of claim 1, wherein each command signal issued from said signal source is directed to one digitally enabled system device.

15. The automation system for speaker amplifier setup of claim 1, wherein said speaker amplifier system panel senses, interprets, executes, and replies to those commands from said set of commands that are addressed uniquely to said speaker amplifier system panel.

16. The automation system for speaker amplifier setup of claim 2, wherein said nonvolatile storage subsystem further comprises a data backup and storage routine, wherein said data backup and storage routine records system status, as generated by said system status report generator, to said nonvolatile storage.

17. An automation system for speaker amplifier setup, comprising:
means for processing electronic signals;
means for communicating between said processing means and a speaker amplifier system panel; and
means for configuring said speaker amplifier system panel in response to signals from said processing means.

18. The speaker amplifier setup automation system of claim 17, further comprising means for interrogating said speaker amplifier system panel by an interrogation routine.

19. The speaker amplifier setup automation system of claim 17, further comprising means for recovering system configuration information from automated records of the status of a system panel maintained in nonvolatile storage media.

20. The speaker amplifier setup automation system of claim 17, further comprising means for visually representing information related to at least one of the identity, functional properties, and condition of said speaker amplifier system panel.

21. A method for configuring a speaker amplifier system panel, comprising:
 - executing a configuration status acquisition routine;
 - executing a configuration status report generator;
 - executing a configuration status display routine generating a display output that represents the acquired configuration status report;
 - generating a configuration change command; and
 - executing a command transmittal to a speaker amplifier system panel.
22. The method for configuring a speaker amplifier system panel of claim 21, further comprising:
 - executing a sequencing routine that can issue a multiplicity of command signals, wherein each command signal is directed to one speaker amplifier system panel and exercises at least one command function of an executable speaker amplifier system panel setup command routine.
23. The method for configuring a speaker amplifier system panel of claim 21, further comprising:
 - executing a data writing and reading routine, wherein the data writing and reading routine records and retrieves system status data in nonvolatile storage, as generated by the system status report generator.